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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,161	10/16/2001	Taizou Tanaka	NEC N01293	7172

7590 10/19/2004

Norman P. Soloway  
HAYES, SOLOWAY, HENNESSEY, GROSSMAN & HAGE, P.C.  
175 Canal Street  
Manchester, NH 03101

EXAMINER

GUHARAY, KARABI

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/981,161

Applicant(s)

TANAKA, TAIZOU

Examiner

Karabi Guharay

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Applicant's Remark, filed on 30 July 2004, has been entered.

However, Certified Translation of the priority document has not been received.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 2-3 & 5-6 are pending, while claims 7-14 are withdrawn from consideration.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, & 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 6534202), in view of Wolk et al. (US 6194119).

Regarding claim 2, Sato et al. disclose an organic electroluminescent device (Fig 1) comprising an anode (2) an organic layer containing at least one organic light emitting layer (3, of Fig 1, or 3b, & 3c of Fig 2), a cathode (4), a cap (protective layer 5 of Fig 4) to encapsulate the device main components having anode, organic layer and cathode, which are stacked on an insulating substrate (1, lines 22-32 of column 5), wherein the cathode (4) has a first metallic cathode and oxygen that is contained in an interface between the organic layer and the first cathode (lines 49-62 of column 3, & lines 18-41 of column 10).

But, Sato et al. are silent about a second cathode layer.

However, Wolk et al., in the same field of organic EL device, teaches that cathode can include multiple layers, such as bi-layer cathode (lines 54-59 of column 15), and further teaches that the addition of another cathode layer make the device more resistant to moisture and also acts as a diffusion barrier against corrosive substances, in case of conducting organic layer (lines 36-67 of column 15, & lines 3-6 of column 16).

Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a second conductive layer, as taught by Wolk et al., in the device of Sato et al. in order to have more resistant to moisture and provide more protection to the device.

Regarding claim 3 (see rejection of claim 2), the combined structure of Sato and Wolk et al. teach plurality of layers of cathode, and further teach that the oxygen content in a first metallic cathode in contact with the organic layer is larger than that in any cathode formed on a second cathode and afterward being not in contact with the organic layer, since Wolk's further cathode layers do not contain oxygen.

Regarding claims 5 & 6, Sato et al. disclose that the film thickness of the first cathode is 20nm to 100 nm (lines 5-6 of column 6, and line 11 of column 18).

### ***Response to Arguments***

Applicant's arguments filed 30 July 2004 have been fully considered but they are not persuasive.

Applicant's argument is that Sato et al. (US 6534202) do not qualify as proper prior art, since effective filing date of the present application is October 17, 2000 when the priority Japanese document was filed. Though applicant's remark states that a certified translation of priority document is enclosed, however, examiner confirmed with applicant's representative that no translation copy was provided with this Remark (see interview summary attached).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Since the certified translation copy has not been filed, Sato et al. is considered as proper prior art for the present application.

Furthermore applicant contends that examiner did not provide any indication how the combination teaches all the elements of the claim.

In response to this argument, examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, first of all, the combined structure of Sato and Wolk teaches all the limitations of claims 2-3 & 5-6, as clearly stated in the rejection, second of all, there is a

clear motivation to combine the references, found in reference of Wolk et al. Thus the prima facie case of obviousness has been established properly.

### ***Other Prior Art Cited***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure : Kido (JP 2000-182774); Kishimoto (JP 11-121176).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

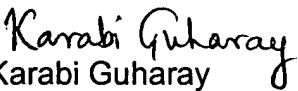
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (571) 272-2452. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Karabi Guharay  
Patent Examiner  
Art Unit 2879